

Laser Work Update & Schedule

Zhi Zhao

September 15, 2016

Laser Rooms



- Be back mid-Oct



- Laser test prior to mid-Oct

CeC Laser Table & Support



- Area: $2 \times 4 \text{ ft}^2$ or other
- Thickness: 4" or 8"
- Vibration prospect & concern

New Room for Optical Table



- Table will be in today & tomorrow
- Test of laser spatial shaping, imaging, & diagnostics
- Copy it for LEReC, CeC, & Gatling gun

ERL Area: Safety Issue



- Laser safety

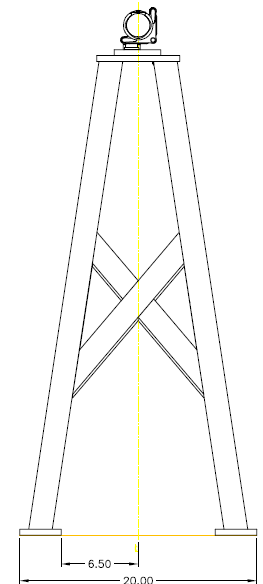
- ERL beamline

It is not an issue for us !

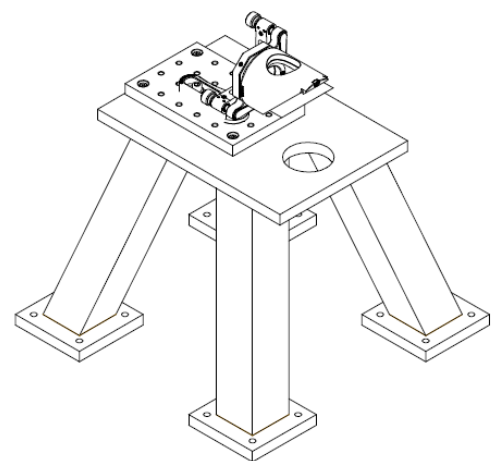
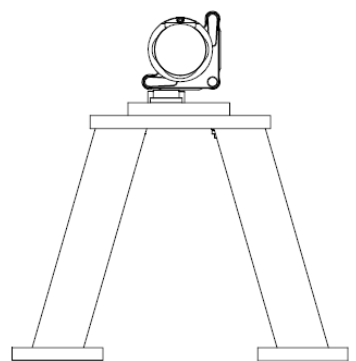
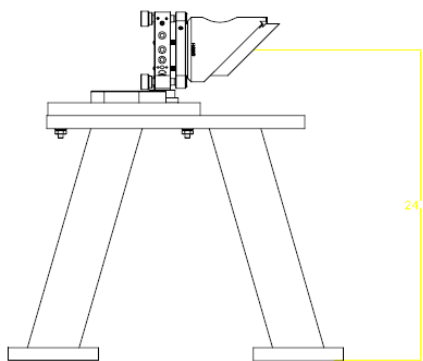
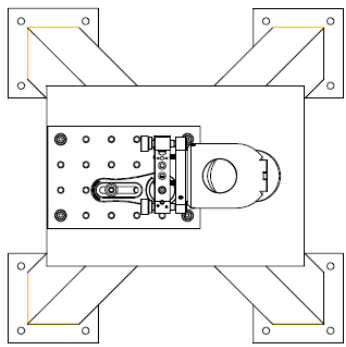
Laser Transport - Part Update

- Three optical tables: 5x12x2 ft³, 2x4x4" ft², 4x6x1 (4") ft³ & extension
- Concrete supports for the Lego and Relay tables
- View window, vacuum pipe, flange, and mechanical support
- Mirrors, lens, & position feedback:
- Mechanical support: lifting and lowering the beam
- Walls for laser tables:
- Temperature & humidity control:

Stands for Laser Transport-Steven



Stands for Laser transport-Steven



REV	ECN NO.	DESCRIPTION	DATE	BY	CHK	DES	ENG
A	-	INITIAL RELEASE	-	-	-	-	-

PRELIMINARY

1	6	3025M0021	VERTICAL SUPPORT WELDMENT, 12" LONG	
1	5	3025M0015	UPPER MIRROR ASSEMBLY	
4	4	92147A430	WASHER, LOCK, .190 SCR, 316 SST	MCMMASTER CAR
4	3	90107A011	WASHER, FLAT, .190, SST	MCMMASTER CAR
4	2	92185A972	SCR, SOC. HD, .190-32 X 1.125 LG, 316 SST	MCMMASTER CAR
4	1	90257A411	NUT, PLAIN, HEX, .190-32, 316 SST	MCMMASTER CAR
QTY	ITEM NUMBER	PART NUMBER	DESCRIPTION	REMARKS

BILL OF MATERIALS

INTERVIEW IN GENERAL ACCORDANCE WITH ASME Y14.5	DATE: 12/28/2011	COLLIDER - ACCELERATOR DEPARTMENT BROOKHAVEN NATIONAL LABORATORY UPTON, N.Y. 11958
DESIGNED BY: J. J. J.	DATE: 12/28/2011	REVIEWED BY: J. J. J.
ENGINEERING AND IN CHARGE: J. J. J.	DATE: 12/28/2011	REVIEWED BY: J. J. J.
APPROVED BY: J. J. J.	DATE: 12/28/2011	REVIEWED BY: J. J. J.
DATE: 12/28/2011	QTY: 100	100
APPLICATION:	DATE: 12/28/2011	DATE: 12/28/2011